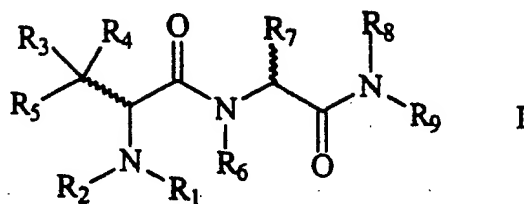


IN THE CLAIMS:

1-21. (Canceled).

22. (Currently Amended) A compound or pharmaceutically acceptable salt thereof, having the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of H, R, and ArR-,
provided that neither R₁ or R₂ is tert-butoxycarbonyl, or R₁ and R₂ are joined to form a
ring;

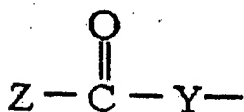
R₃ and R₄ are independently selected from the group consisting of H, R, and ArR-,
or R₃ and R₄ are joined to form a ring;

R₅ is selected from the group consisting of H, R, ArR-, and Ar;

R₆ is selected from the group consisting of H, R, and ArR-;

R₇ and R₈ are independently selected from the group consisting of: H, R, and ArR-;

and



R₉ is:

R is a saturated or unsaturated moiety having a linear, branched, or non-aromatic cyclic skeleton containing one to ten carbon atoms, zero to four nitrogen atoms, zero to four oxygen atoms, and zero to four sulfur atoms, and the carbon atoms are optionally substituted with: =O, =S, -OH, -OR₁₀, -O₂CR₁₀, -SH, -SR₁₀, -SOCR₁₀, -NH₂, -NHR₁₀, -N(R₁₀)₂, -NHCOR₁₀, -NR₁₀COR₁₀, -I, Br, [-C1]-Cl, -F, -CN, -CO₂H, -CO₂R₁₀, -CHO, -COR₁₀, -CONH₂, -CONHR₁₀, -CON(R₁₀)₂, -COSH, -COSR₁₀, -NO₂, -SO₃H, -SOR₁₀, -SO₂R₁₀, wherein R₁₀ is a linear, branched or cyclic, one to ten carbon atom saturated or unsaturated alkyl group;

the ring formed by joining R₁ and R₂ or by joining R₃ and R₄ is a three to seven member non-aromatic cyclic skeleton within the definition of R,

X is a moiety selected from the group consisting of -OH, -OR, =O, =S, -O₂CR, -SH, -SR, -SOCR, -NH₂, -NHR, -N(R)₂, -NHCOR, -NRCOR, -I, -Br, -Cl, -F, -CN, -CO₂H, -CO₂R, -CHO, -COR, -CONH₂, -CONHR, -CON(R)₂, -COSH, -COSR, -NO₂, -SO₃H, -SOR, and -SO₂R;

Ar is an aromatic ring selected from the group consisting of phenyl, naphthyl, anthracyl, phenanthryl, furyl, pyrrolyl, thiophenyl, benzofuryl, benzothiophenyl, quinolinyl, isoquinolyl, imidazolyl, thiazolyl, oxazolyl, and pyridinyl, optionally substituted with R or X;

Y is a linear, unsaturated, two to six carbon atom alkyl group, optionally substituted with R, ArR-, or X, provided however if R₈ is H, then the optional substituents on Y are

limited to R and ArR- wherein R is linear, branched or cyclic alkyl of one to ten carbon atoms and Ar is phenyl, naphthyl-~~naphthyl~~, anthracyl, or phenanthryl; and,

Z is a moiety selected from the group consisting of: -OH, -OR; -SH; -SR; -NH₂; -NHCH(R₁₁)COOH; and -NRCH(R₁₁)COOH, wherein R₁₁ is a moiety having the formula: R, or -(CH₂)_nNR₁₂R₁₃, wherein n=1-4 and R₁₂ and R₁₃ are independently selected from the group consisting of H; R; and -C(NH) (NH₂) or pharmaceutically acceptable salt thereof.

23. (Previously Presented) The compound of claim 22, wherein Ar is phenyl, naphthyl, anthracyl, or pyrrolyl.

24. (Previously Presented) The compound of claim 22, where R₅ is naphthyl, anthracyl, or pyrrolyl.

25. (Previously Presented) The compound of claim 22, wherein R₅ is phenyl.

26. (Previously Presented) The compound of claim 22, wherein R₅ is H.

27. (Previously Presented) The compound of claim 22, wherein R₅ is R.

28. (Previously Presented) The compound of claim 27, wherein R₅ is methyl.

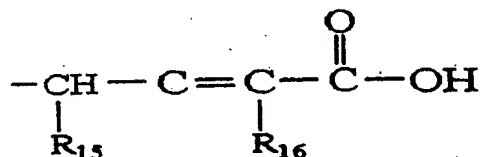
29. (Previously Presented) The compound of claim 22, wherein one of R_3 and R_4 is H and the other of R_3 and R_4 is $ArR-$.
30. (Previously Presented) The compound of claim 22, wherein R_3 and R_4 are each R.
31. (Previously Presented) The compound of claim 30, wherein R_3 and R_4 are independently selected from the group consisting of: methyl, ethyl, n-propyl and n-butyl.
32. (Previously Presented) The compound of claim 31, wherein R_3 and R_4 are each - CH_3 .
33. (Previously Presented) The compound of claim 32, wherein R_5 is Ar.
34. (Previously Presented) The compound of claim 22, wherein R_3 and R_4 are joined and form a moiety selected from the group consisting of β -cyclopropyl, β -cyclobutyl, β -cyclopentyl and β -cyclohexyl.
35. (Previously Presented) The compound of claim 22, wherein R_1 and R_2 are independently selected from the group consisting of H, methyl, ethyl, propyl, n-butyl and acetyl.

36. (Previously Presented) The compound of claim 22, wherein R_1 and R_2 are joined and form a moiety selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl and cyclohexyl.
37. (Previously Presented) The compound of claim 22, wherein R_1 and R_2 are independently H, CH_3 or acetyl.
38. (Previously Presented) The compound of claim 22, wherein R_1 and R_2 are independently H or CH_3 .
39. (Previously Presented) The compound of claim 38, wherein R_1 is H, and R_2 is $-CH_3$.
40. (Previously Presented) The compound of claim 38, wherein R_5 is Ar.
41. (Previously Presented) The compound of claim 38, wherein R_3 and R_4 are each $-CH_3$.
42. (Previously Presented) The compound of claim 41, wherein R_5 is Ar.
43. (Previously Presented) The compound of claim 42, wherein R_5 is phenyl.

44. (Previously Presented) The compound of claim 22, wherein R_6 is H or CH_3 .
45. (Previously Presented) The compound of claim 42, wherein R_6 is H or CH_3 .
46. (Previously Presented) The compound of claim 45, wherein R_6 is H.
47. (Previously Presented) The compound of claim 22, wherein R_8 is H or CH_3 .
48. (Previously Presented) The compound of claim 42, wherein R_8 is H or CH_3 .
49. (Previously Presented) The compound of claim 45, wherein R_8 is H or CH_3 .
50. (Previously Presented) The compound of claim 49, wherein R_8 is CH_3 .
51. (Previously Presented) The compound of claim 22, wherein R_6 is H and R_8 is CH_3 .
52. (Previously Presented) The compound of claim 42, wherein R_6 is H and R_8 is CH_3 .
53. (Previously Presented) The compound of claim 22, wherein R_7 is a three to six carbon atom, branched alkyl group.

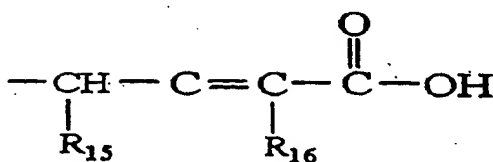
54. (Previously Presented) The compound of claim 42, wherein R_7 is a three to six carbon atom, branched alkyl group.
55. (Previously Presented) The compound of claim 45, wherein R_7 is a three to six carbon atom, branched alkyl group.
56. (Previously Presented) The compound of claim 49, wherein R_7 is a three to six carbon atom, branched alkyl group.
57. (Previously Presented) The compound of claim 53, wherein R_7 is $-\text{C}(\text{CH}_3)_3$.
58. (Previously Presented) The compound of claim 22, wherein R_6 is H, R_7 is $-\text{C}(\text{CH}_3)_3$, and R_8 is $-\text{CH}_3$.
59. (Previously Presented) The compound of claim 22, wherein Z is $-\text{NHCH}(\text{R}_{11})\text{COOH}$ or $-\text{NCH}_3\text{CH}(\text{R}_{11})\text{COOH}$, wherein R_{11} is R; or, $-(\text{CH}_2)_n\text{NHC}(\text{NH})(\text{NH}_2)$.
60. (Previously Presented) The compound of claim 22, wherein Z is $-\text{OR}_{14}$ in which R_{14} is a linear or branched one to six carbon alkyl group.

61. (Previously Presented) The compound of claim 22, wherein Z is OH.
62. (Previously Presented) The compound of claim 22, wherein Z is -OCH₃.
63. (Previously Presented) The compound of claim 22, wherein R₉ has the formula:



wherein R₁₅ is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, tert-butyl, iso-butyl, and sec-butyl; and R₁₆ is selected from the group consisting of H, methyl, ethyl, propyl, iso-propyl, n-butyl, iso-butyl and sec-butyl.

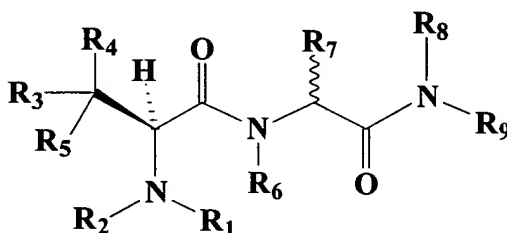
64. (Previously Presented) The compound of claim 63, wherein R₁₆ is methyl.
65. (Previously Presented) The compound of claim 63, wherein R₁₅ is isopropyl and R₁₆ is methyl.
66. (Previously Presented) The compound of claim 55, wherein R₉ has the formula:



wherein R₁₅ is selected from the group consisting of: methyl, ethyl, n-propyl, isopropyl, tert-butyl, iso-butyl, and sec-butyl; and R₁₆ is selected from the group consisting of H, methyl, ethyl, propyl, iso-propyl, n-butyl, iso-butyl and sec-butyl.

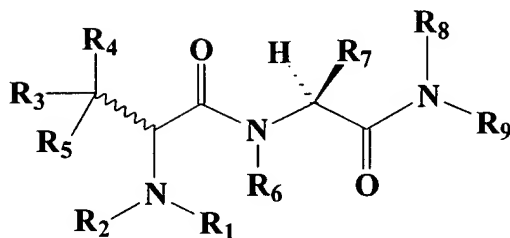
67. (Previously Presented) The compound of claim 66, wherein Z is OH or -OR₁₄ in which R₁₄ is a linear or branched one to six carbon alkyl group.

68. (Previously Presented) The compound of claim 22, having the configuration:

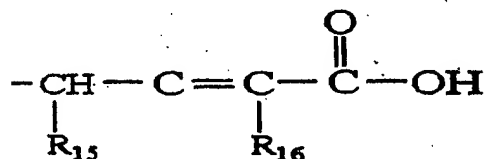


69. (Previously Presented) The compound of claim 22, wherein Y comprises a chiral centre having an s-configuration.

70. (Previously Presented) The compound of claim 22, having the configuration:



71. (Previously Presented) The compound of claim 70, wherein R₅ is Ar; R₃ and R₄ are each CH₃; R₁, R₂, R₆ and R₈ are independently H or CH₃; R₇ is a three to six carbon branched alkyl group; and, R₉ has the formula



wherein R₁₅ is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, tert-butyl, iso-butyl, and sec-butyl; and R₁₆ is selected from the group consisting of H, methyl, ethyl, propyl, iso-propyl, n-butyl, iso-butyl and sec-butyl.

72. (Previously Presented) The compound of claim 22, wherein the compound has the structure:

73. (Currently Amended) A pharmaceutical composition suitable for treating tumors comprising an anti-tumor effective amount of at least one compound of claim 22 and an acceptable pharmaceutical excipient.

74. (Withdrawn) A method of treating tumors by arresting cell mitosis in a patient in need of such treatment comprising administering to said patient an anti-mitotic effective amount of at least one compound of claim 22.